

Social participation patterns and the incidence of functional disability: The JAGES

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Introduction

The association between social participation patterns and the incidence of functional disability has been under-reported, and thus the aim of this study was to elucidate this via a large-scale nationwide cohort study in Japan.

Methods

This study included individuals who were aged 65 or older and functionally independent at baseline. Data from the 2010 Japan Gerontological Evaluation Study (JAGES) were used. The analysis was carried out on 43,578 respondents after acquiring information about the status of their long-term care (LTC) in Japan. An incidence of functional disability was determined based on LTC information obtained from municipal insurance databases. We treated censored cases due to death as competing events. Factor analysis was conducted to obtain social participation patterns, and a competing risk survival analysis was conducted to calculate the hazard ratios (HR) and 95% confidence intervals (CI) for the incidence of functional disability.

Results

Two social participation patterns were identified: a "bridging pattern" (sports groups or clubs, and hobby groups), and a "bonding pattern" (political groups/organization, and industry or trade associations). During a median follow-up of 2.9 years, 3,084 participants had incurred functional disabilities. After adjusting for potential confounders, the HRs for the bridging pattern were 0.77 (95% CI: 0.63, 0.94) for the 3rd, and 0.62 (95% CI: 0.50, 0.76) for the 4th quartile, compared with the bottom quartile (*p* for trend <0.001). The bonding pattern for the 2nd (HR: 0.89, 95% CI: 0.70, 0.99), 3rd (HR: 0.85, 95% CI: 0.77, 0.94), and 4th (HR: 0.80, 95% CI: 0.72, 0.89) quartile also decreased risk for functional disability (*p* for trend <0.001).

Conclusions

Our findings suggest that both the bridging and bonding social participation patterns may reduce the risk of functional disability for Japanese seniors.

Key messages:

- The association between social participation patterns and the incidence of functional disability has been under-reported.
- Both the bridging and bonding social participation patterns may reduce the risk of functional disability for Japanese seniors.